

Haemophilus influenzae Invasive Disease

2008 Case Total	90	2008 Rate	2.47 per 100,000
2007 Case Total	93	2007 Rate	2.70 per 100,000

Invasive *Haemophilus influenzae* (*H. flu*) disease is reportable condition in Oklahoma, and all *H. flu* sterile-site isolates are required to be submitted to the OSDH Public Health Laboratory (PHL) for confirmation and serotype identification. Ninety cases of invasive *H. flu* were reported to the OSDH during 2008 resulting in an incidence rate of 2.47 per 100,000 population. *H. flu* isolates are serotyped based on the presence of a capsule (serotype a-f) or absence of a capsule (non-typeable). Both capsulated and nonencapsulated isolates have the ability to cause severe disease. Of the 90 isolates, 49 (54%) were non-typeable, 11 (12%) were serotype e, 10 (11%) were serotype f, 6 (7%) were serotype a, 1 (1%) was serotype c, and 4 (4%) were serotype b. Isolates for nine (10%) cases were not available for serotype identification by the PHL.

Cases of invasive *H. flu* in 2008 ranged in age from 1 day to 90 years with a median age of 71 years. The highest age-specific incidence rates per 100,000 population was seen among persons 70 years and older (refer to graph). Seven (7.8%) cases occurred among children less than five years of age, none were serotype b.

When a case of *Haemophilus influenzae* type b (Hib) is identified, an active contact investigation commences to locate all close contacts less than 5 years of age to confirm age-appropriate Hib vaccination history. Recommendations for chemoprophylaxis are made for all the case's exposed contacts if a child is less than 5 years of age who is unvaccinated or incompletely vaccinated with Hib vaccine is identified. All four Hib cases reported in 2008 were over the age of 40 years. Investigations conducted by county health department public health nurses determined none of the close contacts were less than 4 years of age; therefore, post-exposure chemoprophylaxis was not recommended.

Descriptive Summary of Reported *Haemophilus influenzae* Invasive Disease Cases, Oklahoma, 2008 (N=90)

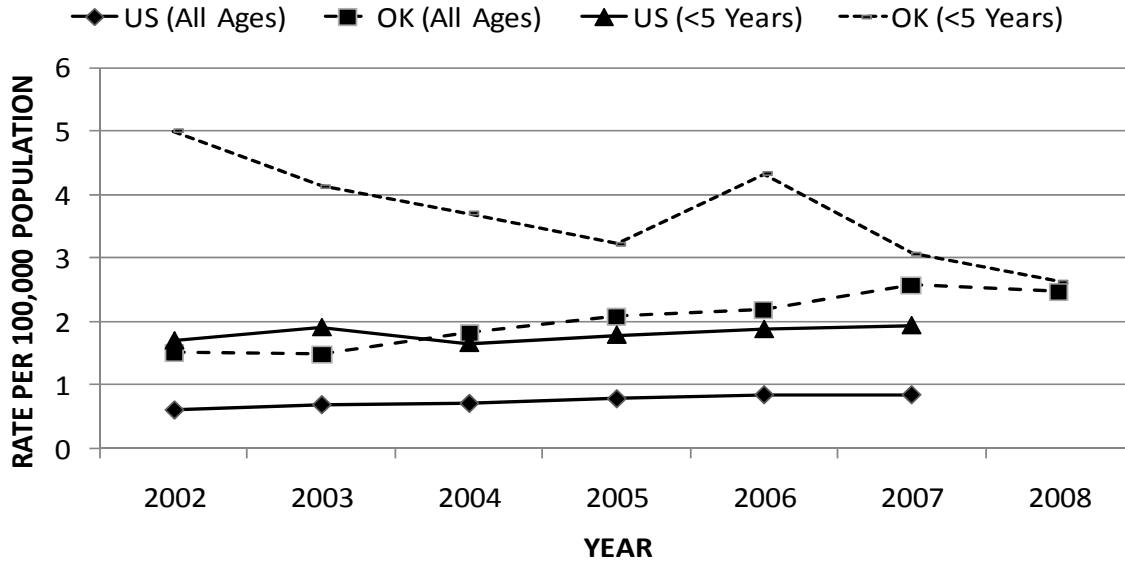
	Frequency (%)	Rate/100,000
Gender		
Male	36 (40%)	2.00
Female	54 (60%)	2.93
Age	Median Age: 71 years (Range: 1 day – 90 years)	
Hospitalized for <i>H. flu</i> *	61 (73%)	--
Deaths to <i>H. flu</i> **	14 (56%)	--
Race		
White	69 (77%)	2.42
Black	9 (10%)	3.10
American Indian	5 (6%)	1.72
Other	0	--
Two or more races	1 (1%)	0.67
Unknown race	6 (7%)	--
Hispanic Ethnicity	1 (1%)	0.36
Infection Types***		
Bacteremia/sepsis	86 (96%)	
Meningitis	2 (2%)	
Pneumonia	51 (58%)	
Other Infection	4 (4%)	
Cases <5 years of age	7 (7.8%)	2.63
Serotype B	0	--

*Number hospitalized for *H. flu* out of those hospitalized (N=83)

**Number died from *H. flu* of those who died (N=25)

***Infection types not mutually exclusive

Invasive *Haemophilus influenzae* Incidence Rate by Year and Age, Oklahoma and U.S., 2002-2008*



*2008 data not available for US

Incidence Rate of Reported Invasive *Haemophilus influenzae* Cases by Age Group, Oklahoma, 2008 (N=90)

